

Early Journal Content on JSTOR, Free to Anyone in the World

This article is one of nearly 500,000 scholarly works digitized and made freely available to everyone in the world by JSTOR.

Known as the Early Journal Content, this set of works include research articles, news, letters, and other writings published in more than 200 of the oldest leading academic journals. The works date from the mid-seventeenth to the early twentieth centuries.

We encourage people to read and share the Early Journal Content openly and to tell others that this resource exists. People may post this content online or redistribute in any way for non-commercial purposes.

Read more about Early Journal Content at http://about.jstor.org/participate-jstor/individuals/early-journal-content.

JSTOR is a digital library of academic journals, books, and primary source objects. JSTOR helps people discover, use, and build upon a wide range of content through a powerful research and teaching platform, and preserves this content for future generations. JSTOR is part of ITHAKA, a not-for-profit organization that also includes Ithaka S+R and Portico. For more information about JSTOR, please contact support@jstor.org.

PROCEEDINGS

OF

The Academy of Ratural Sciences

OF

PHILADELPHIA.

VOLUME LIII.

PART III. SEPTEMBER, OCTOBER, NOVEMBER, DECEMBER, 1901.

PUBLICATION COMMITTEE.

HENRY SKINNER, M.D.,

PHILIP P. CALVERT, Ph.D.,

HENRY A. PILSBRY, Sc.D.,

WITMER STONE,

EDWARD J. NOLAN, M.D.,

The President, SAMUEL G. DIXON, M.D., ex-officio.

EDITOR: EDWARD J. NOLAN, M.D.

THE ACADEMY OF NATURAL SCIENCES

OF

PHILADELPHIA.

1902.

PUBLICATIONS OF

The Academy of Natural Sciences

OF PHILADELPHIA.

Eleven volumes of the New Series of the Journal (Quarto) have been issued—1847 to 1901. The price per volume of four parts is \$10, or \$3 per part to subscribers, and to others \$12.50 per volume, or \$3.75 per part. Vol. VII contains "The Extinct Mammalian Fauna of Dakota and Nebraska, with a Synopsis of the Mammalian Remains of North America." Illustrated with thirty plates. By Joseph Leidy, M.D., LL.D.
The First Series of the Journal, 1817 to 1842, in eight volumes octavo, may

The First Series of the Journal, 1817 to 1842, in eight volumes octavo, may be obtained at \$40 to members, and to the public \$48.

The First Series of the Proceedings of the Academy, octavo, 1841 to 1856, of which eight volumes were completed December 31, 1856, may be obtained at \$24 to members, and to the public \$36.

The Second Series of the Proceedings, commencing January 1, 1857 (of which fourteen volumes were completed December 31, 1870), may be obtained at \$42 to members, or \$3 per volume separately, and to the public \$3.75 per volume.

The Third Series of the Proceedings, illustrated, commencing January 1, 1871 (of which thirty volumes were completed December 31, 1900), is published at \$5 per annum to subscribers, payable in advance; single volumes, \$6.25.

American Journal of Conchology, 1865-71. Seven vols., 8vo. Containing 2500 pages, illustrated by 150 plates, many of them colored, besides about 1000 wood engravings. Published at \$70. Price reduced to \$40 for the set. Separate volumes, \$6 each. \$6 each.

BOOKS FOR SALE.

The Academy has the following works for sale at the prices affixed:

Structural and Systematic Conchology: An Introduction to the Study of the Mollusca. By Geo. W. Tryon, Jr. 1200 pages, 140 plates, describing and illustrating the recent and fossil genera. A conchological text-book. Cloth, \$6.

Manual of Conchology. By Geo. W. Tryon, Jr., continued by Henry A. Plisbery. A complete, fully illustrated monograph of recent mollusks. Series I, Cephalopoda, Scaphopoda, Amphineura and Marine Gastropoda; 17 volumes (finished). Series II, Terrestrial Mollusks, 13 volumes published. Plain edition, per part, \$3; per volume, \$12. Colored edition, per part, \$5; per volume, \$20. Fine edition, heavy plate paper, plates in duplicate, colored and India tinted, per part. \$8; per volume, \$32.

Description of Shells of North America, with 68 colored plates. By Thomas Say. 1830-34. \$10.50.

Monograph of the Terrestrial Mollusca of the United States. With illustrations of all the species. By Geo. W. Tryon, Jr. Fine edition, plate paper, with duplicate plates, colored and tinted, \$20; colored edition, \$13.50; plain edition, \$8.50.

Monograph of the Fresh-Water Univalve Mollusca of the United States. By

with duplicate plates, colored and tinted, \$20; colored edition, \$13.30; plain edition, \$8.50.

Monograph of the Fresh-Water Univalve Mollusca of the United States. By S. S. Haldeman, 1840-44. Continuation to 1871, by Geo. W. Tryon, Jr. Many colored plates. Prices for the continuation: Fine edition, duplicate plates, \$14; with colored plates, \$8. Synonymy of the Species of Strepomatide (Melanians) of the United States. By Geo. W. Tryon, Jr. Cloth, \$1; paper, 50 cents.

List of American Writers on Recent Conchology, with the Titles of the Memoirs and Dates of Publication. By Geo. W. Tryon, Jr. Cloth, \$1; paper, 50 cents.

Monograph of the Order Pholadacea and other Papers. By Geo. W. Tryon, Jr. Cloth, \$1; paper, 50 cents.

Complete Writings on Recent and Fossil Conchology of C. S. Rafinesque. Edited by Wm. G. Binney and Geo. W. Tryon, Jr. \$1.

Observations on the Genus Unio. By Isaac Lea, Ll.D. 4to, Vols. 1 to 13. With Index, Nos. 1, 2 and 3, complete. Several hundred fine lithographic Plates, \$60. Same, Vols. 2 to 13, inclusive, except Vol. 4. Each volume separately, \$5.

Synopsis of the Genus Unio. By Isaac Lea, Ll.D. Fourth edition. \$5.

An Illustrated Catalogue of Japanese Marine Mollusks. By F. Stearns and H. A. Pilsery. Cloth, \$3; paper, \$2.50.

Contributions to Geology. By Isaac Lea. \$3.

Fossil Foot-Marks. By Isaac Lea. Large folio, text and plate. \$2. Plate alone 50 cents.

Notice to Booksellers—All the publications of the Academy will be supplied to booksellers at a discount of 20 per cent. on the prices charged to the public.

Apply to Edward J. Nolan, M.D., at the Hall of the Academy, Logan Square. September, 1901.

PUBLICATIONS OF THE ACADEMY OF NATURAL SCIENCES OF PHILADELPHIA.

- Journal of The Academy of Natural Sciences, of Philadelphia. 8vo. I, 1817-18--VIII, 1839-42.
- JOURNAL of The Academy of Natural Sciences of Philadelphia. Second Series. 4to. I, 1847-50—XI, 1897-1901.
- Report of the transactions of The Academy of Natural Sciences of Philadelphia, during the years 1825–1826. Submitted by S. G. Morton, M.D., Recording Secretary. Philadelphia, 1827. 8vo. Pp. 1–15. Same, 1827–28. 8vo. 1829. Pp. 1–16.
- PROCEEDINGS of The Academy of Natural Sciences of Philadelphia. 8vo. I, 1841-43—LIII, 1891.
- Annual reports of the Treasurer have been published separately since 1890.
- CIRCULAR (small pamphlet containing instructions for collecting and preparing specimens of natural history. Undated, but probably about 1830). 12mo. Pp. 1-11.
- ACT OF INCORPORATION and by-laws of The Academy of Natural Sciences of Philadelphia. Philadelphia, 1836. 8vo. Pp. i-iv, 1-8. The first edition of the Act of Incorporation and Constitution was published in 1817 as part of the first number of the octavo Journal. Republished with By-Laws in Vol. VI, 1829.

Same, 1849. 8vo. Pp. 1-12.

Same, 1857. 8vo. Pp. 1-38.

Same, 1866. 8vo. Pp. 1-24.

Same, 1869. 8vo. Pp. 1-22. Issued with the Proceedings, XXI, 1870

Same, 1876. 8vo. Pp. 1-24.

Same, 1880. 8vo. Pp. 1-24.

Same, 1885. 8vo. Pp. 1-24.

Same, 1893. 8vo. Pp. 1–24.

Same, 1899. 8vo. Pp. 1-99.

LIST OF MEMBERS and correspondents of The Academy of Natural Sciences of Philadelphia, from the origin of the Society on the 25th of January, 1812, to the 1st of November, 1836. Philadelphia, 1836. 8vo. Pp. 1-16.

Same, 1841. 8vo. Pp. 1-19. Issued with Proceedings, I, 1841-43. Same, 1848. 4to. Pp. 1-8.

MEMBERS AND CORRESPONDENTS of The Academy of Natural Sciences of Philadelphia. 1868. Philadelphia, 1868. 8vo. Pp. 1-27. Issued with Proceedings, XXI, 1870.

Same, 1877. 8vo. Pp. 1-48.

Same, 1893. 8vo. Pp. 1-62.

The Academy of Natural Sciences of Philadelphia. 1890. 12mo. Pp. 1-11. 2 plates. Small descriptive pamphlet, issued in connection with application to the Legislature for an appropriation toward the completion of the building.

Another edition, with modifications. 1895. Pp. 1-7.

- CATALOGUE OF THE LIBRARY Of The Academy of Natural Sciences of Philadelphia. Philadelphia, 1837. 8vo. Pp. i-x, 1-300. The first catalogue of the library was begun in the Journal, No. 1, Vol. I, 1817, and continued in Vols II, III, IV.
- GUIDE TO THE MUSEUM of The Academy of Natural Sciences of Philadelphia. 8vo. Philadelphia, 1876. Pp. 1-128.
- HANDBOOK TO THE MUSEUM of The Academy of Natural Sciences of Philadelphia. Edited by J. H. Slack, M.D. 12mo. Pp. 1-116. Philadelphia, 1862.
 - Same, 2d edition, 1866. 12mo. Pp. 1-30.
- NOTICE OF THE ACADEMY OF NATURAL SCIENCES OF PHILADELPHIA.

 Second edition. Philadelphia, 1831. Pp. 1-16. (The first edition was published in the American Journal of Science and Arts, XIX, pp. 88-96.)
 - Same, 3d edition, 1836. Pp. 1-32.
 - Same, 4th edition, 1837. Pp. 1-24.
- A NOTICE OF THE ORIGIN, PROGRESS AND PRESENT CONDITION OF The Academy of Natural Sciences of Philadelphia. By W. S. W. Ruschenberger, M.D., Surgeon U. S. Navy. (Read before the Society, February 10, 1852.) 8vo. Philadelphia. Pp. 1-78. (Contains list of members.)
 - Same, 2d edition, 1860. 8vo. Pp. 1-102.
- Address delivered on laying the cornerstone of The Academy of Natural Sciences, May 25, 1839. By Walter R. Johnson, A.M., M.A.N.S., etc. Published by order of the Academy. Philadelphia, 1839. 8vo. Pp. 1-8. Issued with Proceedings, I, 1841-43.
- Discourse in commemoration of the founding of The Academy of Natural Sciences of Philadelphia. By William Parker Foulke. Delivered March 30, 1854, in the Hall of the University of Pennsylvania. 8vo. Philadelphia, 1854. Pp. 1-58.
- Addresses delivered on laying the cornerstone of an edifice for The Academy of Natural Sciences of Philadelphia, October 30, 1872. Philadelphia, 1873. (W. S. W. Ruschenberger, M.D., Rev. E. R. Beadle, J. Aitken Meigs, M.D., and Horatio C. Wood, M.D.) 8vo. Pp. 1-29. Issued with Proceedings, XXIV, 1872.
- Address delivered on the occasion of the opening of the new lecture hall of The Academy of Natural Sciences of Philadelphia, February 22, 1892. By the Rev. Henry C. McCook, D.D., Vice-President. 8vo. Pp. 1-4.
- REMARKS OF MR. JOHN WELSH, Chairman of a Committee appointed by certain citizens of Philadelphia, addressed to a special committee of the House of Representatives of Pennsylvania, com-

posed of the members from the city of Philadelphia, to which was referred the Senate Bill, giving permission to the Councils of Philadelphia, to authorize the erection on the Penn Squares, of buildings for the Promotion of Natural Science, Literature, the Fine Arts, and the Mechanic Arts. February 26, 1868. 8vo. Pp. 1–7.

ANNUAL REPORTS (first, 1868, to eleventh, 1878) of the Board of Trustees of the Building Fund of The Academy of Natural Sciences of Philadelphia to the Contributors to the Fund. 8vo.

(No reports were published between 1878 and 1891.)

- ANNUAL REPORTS of the Trustees of the Building Fund of The Academy of Natural Sciences of Philadelphia to the Contributors to the Fund, January, 1891, 1892 and 1893. 8vo.
- An Address. The claims of The Academy of Natural Sciences of Philadelphia to public favor. By W. S. W. Ruschenberger. Philadelphia, 1871. 8vo. Pp. 1-32. Three plates.
- REPORT OF THE CONDITION of The Academy of Natural Sciences of Philadelphia, on moving into its new edifice southwest corner of Race and Nineteenth streets. Made to the contributors to its building-fund, April 28, 1976. By W. S. W. Ruschenberger. Philadelphia, 1876. 8vo. Pp. 1-56.
- Summary History of The Academy of Natural Sciences of Philadelphia. By W. S. W. Ruschenberger, M.D. Philadelphia, 1877. 8vo. Pp. 99-119. (Published as part of Guide to the Museum. 1876.)
- CATALOGUE OF THE STRIGIDÆ in the collection of The Academy of Natural Sciences of Philadelphia. By John Cassin. 8vo, 19 pp. (Issued with Proceedings, IV, 1848-49.)
- CATALOGUE OF THE VULTURIDÆ in the collection of The Academy of Natural Sciences of Philadelphia. By John Cassin. 8vo, 7 pp. (Issued with Proceedings, IV, 1848-49.)
- CATALOGUE OF THE CAPRIMULGIDÆ in the collection of The Academy of Natural Sciences of Philadelphia. By John Cassin, November 1, 1851. 8vo, 15 pp. (Issued with Proceedings, V, 1850-51.)
- CATALOGUE OF THE HIRUNDINIDÆ in the collection of The Academy of Natural Sciences of Philadelphia. By John Cassin, July 1, 1853. 8vo, 15 pp. (Issued with Proceedings, VI, 1852-53.)
- CATALOGUE OF THE HALCYONIDÆ in the collection of The Academy of Natural Sciences of Philadelphia. By John Cassin, November 1, 1852. 8vo, 19 pp. (Issued with Proceedings, VI, 1852-58.)
- CATALOGUE OF THE OOLOGICAL COLLECTION in The Academy of Natural Sciences of Philadelphia. By A. L. Heermann, M.D., March 1, 1853. 8vo. Pp. 1-36. (Issued with Proceedings, VI, 1852-53.)
- CATALOGUE OF HUMAN CRANIA in the collection of The Academy of Natural Sciences of Philadelphia: Based upon the third edition of Dr. Morton's "Catalogue of Skulls," etc. By J. Aitken Meigs, M.D., Librarian of The Academy of Natural Sciences of Philadelphia, etc. 8vo. Philadelphia: Pp. 1-112. (Issued with Proceedings, VIII, 1856.)

- CATALOGUE OF THE INVERTEBRATE FOSSILS OF THE CRETACEOUS FORMATION of the United States, with references. By William M. Gabb, September, 1859. 8vo. Pp. 1-20. (Issued with Proceedings, XI, 1859.)
- CATALOGUE OF THE FISHES OF THE EASTERN COAST OF NORTH AMERICA, from Greenland to Georgia. By Theodore Gill. January, 1861. 8vo. Pp. 1-63. (Issued with Proceedings, XIII, 1861.)
- A Memoir of William Maclure, Esq., late President of the Academy of Natural Sciences of Philadelphia. By Samuel George Morton, M.D., one of the Vice-Presidents of the Institution. Read July 1, 1841, and published by direction of the Academy. Philadelphia, 1841. 8vo. Pp. 1-37, Portrait. (Issued with Proceedings, I, 1841-43.)
 - Same, 2d edition. Philadelphia, 1844. 8vo Pp. 1-34.
- A MEMOIR OF SAMUEL GEORGE MORTON, M.D., late President of The Academy of Natural Sciences of Philadelphia. By Charles D. Meigs, M.D. Read November 6, 1851, and published by direction of the Academy. Philadelphia, 1851. 8vo. Pp. 1-48.
- A Syllabus of the courses of lectures and laboratory study and work provided for students in the Natural Sciences. Philadelphia: Printed for the Committee on Instruction, 1884. 8vo. Pp. 1-23.

BIOLOGICAL AND MICROSCOPICAL SECTION.

By-Laws and list of members. 1877. 8vo. Pp. 1-14.

By-Laws with a list of members and contributors. Philadelphia, 1888. 8vo. Pp. 1-13.

- (PROCEEDINGS of the) Biological Department of The Academy of Natural Sciences of Philadelphia. 1858, 1859, 1860. (Issued with Proceedings of the Academy of corresponding dates.)
- (PROCEEDINGS of the) Biological and Microscopical Department of The Academy of Natural Sciences. 1868, 1869, 1870, 1871. (Issued with Proceedings of the Academy of corresponding dates.)

CONCHOLOGICAL SECTION.

- By-Laws established for the government of the Conchological Section of The Academy of Natural Sciences of Philadelphia (n. d.). 8vo. Pp. 1-19.
- Manual of Conchology; Structural and Systematic. With illustrations of the species. By George W. Tryon, Jr. 8vo. I, Cephalopoda, 1879, 316 pp., 112 plates. II, Muricidæ, including Purpurinæ, 1880, 289 pp., 70 plates. III, Tritonidæ, Fusidæ, Buccinidæ, 1881, 310 pp., 87 plates. IV, Nassidæ, Turbinellidæ, Volutidæ, Mitridæ, 1882, 276 pp., 58 plates. V, Marginellidæ, Olividæ, Columbellidæ, 1883, 276 pp., 63 plates. VI, Conidæ, Pleurotomidæ, 1884, 400 pp., 65 plates. VII, Terebridæ, Cancellariidæ, Strombidæ, Cypræidæ, Ovulidæ, Cassididæ, Doliidæ, 1885, 309 pp., 75 plates. VIII,

Naticidæ, Calyptræidæ, Onustidæ, Turritellidæ, Vermetidæ, Cæcidæ, Eulimidæ, Pyramidellidæ, Turbonillidæ, 1886, 461 pp., 79 plates. IX, Solariidæ, Ianthinidæ, Trichotropidæ, Scalariidæ, Cerithiidæ, Rissoidæ, Littorinidæ, 1887, 488 pp., 71 plates. X, Neritidæ, Adrorbiidæ, Cyclostrematidæ, Liotiidæ, 1888.

MANUAL OF CONCHOLOGY, Structural and Systematic. With illustrations of the species. By George W. Tryon, Jr., continued by Henry A. Pilsbry. Phasianellinæ, Turbinidæ, Delphinulinæ, 1888, 323 pp., 69 plates. XI, Trochidæ, 1889, 519 pp., 62 plates. XII, Stomatellidæ, Scissurellidæ, Pleurotomariidæ, Haliotidæ, Scutellinidæ, Addisoniidæ, Cocculinidæ, Fissurellidæ, 323 pp., 65 plates. XIII, Acmæidæ, Lepetidæ, Patellidæ, Titiscaniidæ, 1891, 195 pp., 74 plates. XIV, Lepidopleuridæ, Ischnochitonidæ, Chitonidæ, Mopaliidæ, 1892, 350 pp., 68 plates. XV, Acanthochitidæ, Cryptoplacidæ, Actæonidæ, Tornatinidæ, Scaphandridæ, Bullidæ, Akeridæ, Hydatinidæ, Ringiculidæ, 1893-94, 436 pp., 61 plates. XVI, Philinidæ, Aglajidæ, Gastropteridæ, Aplysiidæ, Pleurobranchidæ, Umbrellidæ, etc., 1895, 262 pp., 75 plates. XVII, Scaphopoda. By H. A. Pilsbry and B. Sharp. Aplacophora. Index to Series, 1897-8, 348 pp., 48 plates.

SECOND SERIES: FULMONATA. Manual of Conchology, structural and systematic. With illustrations of the species. By George W. Tryon, Jr. I, Testacellidæ, Oleacinidæ, Streptaxidæ, Helicoidea, Vitrinidæ, Limacidæ, Arionidæ, 1885, 364 pp., 60 plates. II, Zonitidæ, 1886, 265 pp., 64 plates. III, Helicidæ, 1887, 313 pp., 63 plates. IV, Helicidæ, 1888, 266 pp., 69 plates.

SECOND SERIES: PULMONATA. Manual of Conchology, structural and systematic. With illustrations of the species. By George W. Tryon, Jr., continued by Henry A. Pilsbry. V, Helicidæ, 1889, 216 pp., 64 plates. VI, Helicidæ, 1890, 324 pp., 68 plates. VII, Helicidæ, 1891, 225 pp., 61 plates. VIII, Helicidæ, 1892, 314 pp., 58 plates. IX, Guide to the Study of Helices, 1894-95, 366 pp., 71 plates, and Index to Helices, 126 pp. X, American Bulimi and Bulimuli, Strophocheilus, Plekocheilus, Auris, Bulimulus, 1895-6, 212 pp., 51 plates. XI, American Bulimulidæ: Bulimulus, Neopetræus, Oxychona, and South American Drymæus, 1897-8, 339 pp. 51 plates. XII, American Bulimulidæ: North American and Antillean Drymæus, Leiostracus, Orthalicinæ and Amphibulimæ, 1899, 258 pp., 64 plates. XIII, Australian Bulimulidæ: Bothriembryon, Placostylus. Helicidæ: Amphidromus, 1900, 253 pp., 72 plates.

(Of the Manual of Conchology from Vol. I to the first part of Vol. X of the first series and Vols. I, II, III and IV of the second series were published by Mr. George W. Tryon, Jr. The work was bequeathed by him to the Conchological Section of the Academy and has since been continued by Henry A. Pilsbry, D.Sc.)

- CATALOGUE AND SYNONYMY of the genera, species and varieties of recent mollusca, described prior to January 1, 1867. With dates of publication, references to plates and localities. Compiled and published under the authority of the Conchological Section of The Academy of Natural Sciences of Philadelphia. Part I, Pholadacea, by G. W. Tryon, Jr.; Solenidæ and Mactridæ, by T. A. Conrad, November, 1867, 47 pp. II, Anatinidæ, by T. A. Conrad; Saxicavidæ, Myidæ, Corbulidæ, Tellinidæ, by G. W. Tryon, Jr.; Pandoridæ, by P. P. Carpenter, May, 1869, 78 pp. III, Corbiculadæ, by Temple Prime, October, 1869, 61 pp. IV, Porcellanidæ, Amphiperasidæ, by S. R. Roberts, November, 1869, 26 pp. V, Marginellidæ, by John H. Redfield; Melaniidæ, by A. Brot, M.D., November, 1870, 111 pp. (Issued in the American Journal of Conchology.)
- AMERICAN JOURNAL OF CONCHOLOGY, Vols. I and II, edited by George W. Tryon, Jr., 1865, 1866. Vols. III-VII, published by the Conchological Section of The Academy of Natural Sciences of Philadelphia. 8vo. 1867-1872.
- Monograph of the Fresh-water Univalve Mollusca of the United States. In continuation of Prof. S. S. Haldeman's work, published under the above title. By George W. Tryon, Jr. Turbidæ, Physadæ, 1871. 8vo, 238 pp., 17 plates.

Entomological Section (American Entomological Society).

- PROCEEDINGS of the Entomological Society of Philadelphia, I, 1861—VI, 1867. 8vo.
- THE PRACTICAL ENTOMOLOGIST, I, 1865-66-II, 1866-67. 8vo.
- Transactions of the American Entomological Society, I, 1867—XXVII, 1901. 8vo.
- PROCEEDINGS of the monthly meetings of the Entomological Section of The Academy of Natural Sciences of Philadelphia. (Issued with Transactions of the American Entomological Society, VII—XV.)
- Entomological News and Proceedings of the Entomological Section of The Academy of Natural Sciences of Philadelphia. Editor, Henry Skinner, M.D. I, 1890—XII, 1901. 8vo.
- SYNOPSIS OF THE FAMILIES AND GENERA OF THE HYMENOPTERA OF America, north of Mexico, by E. T. Cresson, 1887, 8vo, 350 pp.
- THE BUTTERFLIES OF NORTH AMERICA, by Wm. H. Edwards. [Vol. I.] 1868–1872. 4to, 153 pp. 50 colored plates.
- SYNOPSIS OF NORTH AMERICAN BUTTERFLIES, by Wm. H. Edwards. 1872. 4to, 52 pp.
- CATALOGUE OF THE LEPIDOPTERA of America, north of Mexico, by W. H. Edwards. Part I, Diurnals, 1877, 8vo, 68 pp.
- REVISED CATALOGUE of the Diurnal Lepidoptera of America, north of Mexico, by W. H. Edwards, 1884, 8vo, 95 pp.

LIST OF THE COLEOPTERA of America, north of Mexico, by Samuel Henshaw, 1885. Supplement No. 1, 1887; No. 2, 1889; No. 3, 1895.

By-Laws of the American Entomological Society, 1889

LIST OF THE LEPIDOPTERA OF BOREAL AMERICA, by J. B. Smith, 1891.

ENTOMOLOGISTS' DIRECTORY, by Henry Skinner, 1900.

SYNONYMIC CATALOGUE OF THE NORTH AMERICAN RHOPALOCERA, by Henry Skinner, M.D., 1898, 8vo, 130 pp.

LIST OF MEMBERS of the American Entomological Society, resident and corresponding, 1897.

MINERALOGICAL AND GEOLOGICAL SECTION.

PROCEEDINGS of the Mineralogical and Geological Section of The Academy of Natural Sciences of Philadelphia. No. 1, 1877-1879. Pp. 241-329. Issued in Proceedings of the Academy, XXXII, 1880. No. 2, 1880-1881, pp. 36-68. 8vo. Issued in Proceedings of the Academy, XXXIV, 1882.